Corrigendum to "Relationships between the surface concentration of particulate organic carbon and optical properties in the eastern South Pacific and eastern Atlantic Oceans" published in Biogeosciences, 5, 171?201, 2008

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"Relationships between the surface concentration of particulate organic carbon and optical properties in the eastern South Pacific and eastern Atlantic Oceans" published in Biogeosciences, 5, 171–201, 2008

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The paper "Relationships between the surface concentration of particulate organic carbon and optical properties in the eastern South Pacific and eastern Atlantic Oceans" by Stramski et al. (Biogeosciences, 5, 171–201, 2008) contains an error in the values of the particulate backscattering ratio at 555 nm, $\tilde{b}_{bp}=b_{bp}(555)/b_p(555)$, depicted for the ANT-XXIII/1 cruise in Figs. 11 and 12b. The reported values were too low due to an inadvertent mistake in which incorrect values of the particulate scattering coefficient, $b_p(555)$, were used in the calculation of $\tilde{b}_{bp}$. I offer my apologies to the co-authors, reviewers, and readers of the paper.

Here the corrected Figs. 11 and 12b are presented. In contrast to the original figures contained in the paper, the corrected values of the particulate backscattering ratio, $b_{bp}(555)/b_p(555)$, are seen to be generally similar for the two cruises compared, BIOSOPE and ANT-XXIII/1. For the BIOSOPE data set the average value is 0.0104 (standard deviation SD=0.0026), whereas for the ANT-XXIII/1 data set it is 0.0090 (SD=0.0010). The erroneous average value reported in the original paper for ANT-XXIII/1 was 0.0054, which incorrectly suggested significant systematic difference between the two cruises. In actuality, no significant differences are observed, with the exception of a few BIOSOPE stations that show a somewhat higher backscattering ratio compared to the rest of the data set. In consequence, the discussion focusing on the differences between the cruises presented in Sect. 3.4 (p. 193–196) of the original paper is largely irrelevant. However, all other results and conclusions including the POC algorithms are unaffected by this error.

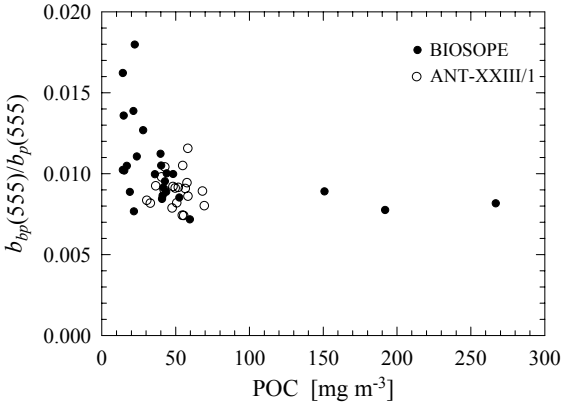

Fig. 11. Particulate backscattering ratio, $b_{bp}(555)/b_p(555)$, plotted as a function of surface concentration of particulate organic carbon, POC, for the BIOSOPE and ANT-XXIII/1 cruises.

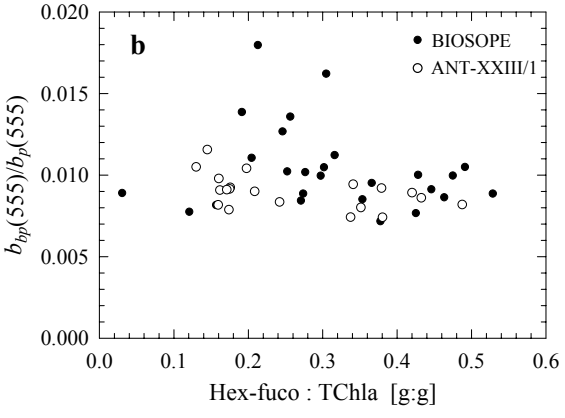

Fig. 12. (b) Particulate backscattering ratio, $b_{bp}(555)/b_p(555)$, plotted as a function of pigment ratio Hex-fuco:TChla in surface waters for the BIOSOPE and ANT-XXIII/1 cruises.

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